

## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Paul A. Fournier (Reg. No. 41,023) on October 27, 2009.

The application has been amended as follows the amendment filed on 09/16/2009:

**Claim 2 has been canceled.**

Claims 1 and 11 has been amended as following:

Claim 1 (Twice Amended): A curved surface shape inspection method, wherein a fiber optic block formed by bundling and integrating a plurality of optical fibers each composed of a core region and a clad region surrounding the core region, and comprising an at least partially curved convex input end face composed of one end of each optical fiber and an output end face that is positioned on the opposite side to the input end face, is prepared for a to-be-measured object including a measurement surface having a curved concave surface shape;

the input end face of the fiber optic block and the measurement surface of the to-be-measured object are pressed against each other, and

an optical image formed by bringing the input end face into contact with the measurement surface and output from the output end face of the fiber optic block is

used to inspect the curved concave surface shape of the measurement surface of the to-be-measured object, wherein

the measurement surface of the to-be-measured object is an inner surface of a groove included in the to-be-measured object, and  
the optical image output from the output end face of the fiber optic block includes two contact portion images corresponding to the two respective contact portions of the input end face and the measurement surface, and wherein  
the distance between the two contact portion images is measured to inspect the curved concave surface shape of the measurement surface of the to-be-measured object.

Claim 11 (Twice Amended): A fiber optic block adapted to be applied to an inspection of the curved concave surface shape of a measurement surface of a to-be-measured object and formed by bundling and integrating a plurality of optical fibers each composed of a core region and a clad region surrounding the core region,

the fiber optic block comprising: an at least partially curved convex input end face composed of one end of each optical fiber, which is brought into contact with the curved concave surface shape of the measurement surface of the to-be-measured object when the inspection is carried out; and

an output end face positioned on the opposite side to the input end face and adapted to output an optical image to be formed by light entering the input end face,  
wherein

the measurement surface of the to-be-measured object is an inner surface of a groove included in the to-be-measured object, and  
the optical image output from the output end face of the fiber optic block includes two contact portion images corresponding to the two respective contact portions of the input end face and the measurement surface, and wherein  
the distance between the two contact portion images is measured to inspect the curved concave surface shape of the measurement surface of the to-be-measured object.

The following is an examiner's statement of reasons for allowance:

As to independent claims 1 and 11 are allowable over the prior art for at least the reason that the prior art of record, taken alone or in combination, fails discloses or render obvious a curved surface shape inspection method and fiber optic block comprising all the specific elements with the specific combination including of the fiber optic block comprising: an at least partially curved convex input end face composed of one end of each optical fiber, which is brought into contact with the curved concave surface shape of the measurement surface of the to-be-measured object when the inspection is carried out, wherein the measurement surface of the to-be-measured object is an inner surface of a groove included in the to-be-measured object, and the optical image output from the output end face of the fiber optic block includes two contact portion images corresponding to the two respective contact portions of the input end face and the measurement surface, and wherein the distance between the two

contact portion images is measured to inspect the curved concave surface shape of the measurement surface of the to-be-measured object in combination with the rest of the limitation of claims 1 and 11, wherein dependent claims 3-10 and 12-20 are allowable by virtue of dependency on the allowed claims 1 and 11.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Nguyen whose telephone number is (571) 272-2425. The examiner can normally be reached on 9:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on (571) 272-2800 ext. 86. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 27, 2009

/SN/

/Sang Nguyen/  
Primary Examiner, Art Unit 2886